

(19) World Intellectual Property
Organization
International Bureau



Rec'd PCT/PTO 25 FEB 2005
10/525591



(43) International Publication Date
11 March 2004 (11.03.2004)

PCT

(10) International Publication Number
WO 2004/019923 A1

(51) International Patent Classification⁷: A61K 31/122,
31/593, A61P 9/04, 9/10, 9/12, 9/14

(74) Agent: HUYGENS, Arthur, Victor; Octrooibureau Huy-
gens, P.O. Box 86, NL-3400 AB IJsselstein (NL).

(21) International Application Number:
PCT/EP2003/009746

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZM, ZW.

(22) International Filing Date:
1 September 2003 (01.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0220182.0 30 August 2002 (30.08.2002) GB

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): VITAK
BV [NL/NL]; P.O. Box 616, NL-6200 MD Maastricht
(NL).

Published:

— with international search report

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): VERMEER, Cees
[NL/NL]; c/o Vitak BV, P.O. Box 616, NL-6200 MD
Maastricht (NL).

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: COMPOSITIONS COMPRISING VITAMIN K FOR TREATING OR PREVENTING AGE-RELATED STIFFENING
OF ARTERIES

(57) Abstract: Vitamin K is effective in counteracting the reduction in arterial elasticity normally associated with the aging process.
A pharmaceutical composition or nutritional formulation comprising vitamin K can be used to combat age-related stiffening of the
arteries, and the consequences thereof, namely pulmonary congestion, hypertension, left ventricular hypertrophy, congestive (right
sided) heart failure, left sided or left ventricular failure, chronic cardiac failure, angina pectoris, myocardial infarction, Mönckeberg's
sclerosis and stroke.

WO 2004/019923 A1